

From: [R6HarveyENVL](#)
To: [R6HarveyInfo](#)
Subject: FW: more GMAP Info
Date: Friday, September 8, 2017 11:52:53 AM

From: Kudarauskas, Paul
Sent: Friday, September 8, 2017 11:52:52 AM (UTC-06:00) Central Time (US & Canada)
To: R6HarveyENVL; Stone, Nick; Newhart, Gary; Charters, David
Subject: more GMAP Info

The GMap data output format is a tab delimited text file with header and some other information included in the top of the file.

They can process these files into Google Earth kml files in near real time. The Google Earth images can be used to understand where sources are and where the plumes are going. Under the right conditions, they can do in-situ quantification estimates and can certainly acquire data suitable for any inverse plume model.

Methane is measured by cavity ring down and is as good a number as exists.

They measure total VOCs using a ppb level PID detector calibrated with isobutylene.

They have 5 sigma detection limits and enough data to determine the error bounds (analysis not complete) for the following compounds:

Benzene	10ppb
Toluene	30ppb
Ethylbenzene	70ppb
o-xylene	60ppb
m-xylene	40ppb
p-xylene	15ppb
SO2	65ppb

They also measure ammonia, ozone, NO, NO2, and formaldehyde but these numbers are un-calibrated. Gmap has air canisters in the truck ready to deploy so that compounds detected by the PID can be identified by lab analysis.

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